

I CLAIM:

1. A plastic liquid dispenser for dropwise dispensing liquid, comprising:

an elongated tube having a closed first top end,
5 an open first bottom end opposite to said first top end, a first peripheral wall extending between said first top and bottom ends and confining a first receiving space, and a first opening formed in said first peripheral wall adjacent to said first top end;
10 and

a closed shell having a second top end, a second bottom end opposite to said second top end, a second peripheral wall that extends between said second top and bottom ends, that confines a second receiving
15 space, and that is connected sidewise to said tube, and a second opening formed in said second peripheral wall and aligned axially with and in fluid communication with said first opening, said second peripheral wall having an upper portion that is
20 resilient and that is compressible so as to generate a suction force in said first and second receiving spaces when said upper portion of said second peripheral wall is pressed and is subsequently released, said second opening being formed in said
25 upper portion of said second peripheral wall, said first bottom end of said tube protruding downward relative to said second bottom end of said shell.

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2. The liquid dispenser of Claim 1, wherein said shell is generally rectangular in shape, said second peripheral wall having opposite front and rear side walls extending between said second top and bottom ends, and opposite left and right side walls interconnecting said front and rear side walls, said second opening being formed in said left side wall adjacent to said second top end, said left side wall being connected to said tube.

10 3. The liquid dispenser of Claim 2, wherein said left side wall is integrally formed with said tube.

4. The liquid dispenser of Claim 2, further comprising a structure reinforcing rib that extends upright from said second bottom end and that extends between and that interconnects said front and rear side walls, said rib being integrally formed with said shell, said upper portion of said second peripheral wall extending downward from said second top end to a level corresponding to a top edge of said rib.

20 5. The liquid dispenser of Claim 4, wherein said second receiving space has an upper space confined by said upper portion of said second peripheral wall, said upper space having a volume greater than that of said first receiving space.

25 6. The liquid dispenser of Claim 5, wherein said second peripheral wall further has a lower portion that extends from said upper portion to said second

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bottom end, said second receiving space further having a lower space that is confined by said lower portion of said second peripheral wall and that has a volume greater than a value obtained by subtracting
5 the volume of said first receiving space from the volume of said upper space of said second receiving space.

7. The liquid dispenser of Claim 2, wherein said second top end is substantially flush with said first
10 top end.

8. The liquid dispenser of Claim 7, wherein said second top end is spaced apart from said second opening by a vertical distance that is sufficient to prevent liquid from being entrapped at a corner
15 defined by said second top end and said left side wall.

9. The liquid dispenser of Claim 8, wherein said vertical distance ranges from about 1mm to 15mm.

10. The liquid dispenser of Claim 8, wherein said vertical distance ranges from about 3mm to 10mm.

20 11. The liquid dispenser of Claim 1, wherein said tube has an inner diameter ranging from about 0.5mm to 4mm.

12. The liquid dispenser of Claim 1, wherein said tube has an inner diameter ranging from about 1.5mm to 3mm.

13. The liquid dispenser of Claim 11, wherein said
25 tube has a length, which extends from said first top end to said first bottom end, ranging from about 50mm to 120mm.

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14. The liquid dispenser of Claim 12, wherein said tube has a length, which extends from said first top end to said first bottom end, ranging from about 70mm to 90mm.

5 15. The liquid dispenser of Claim 7, wherein said shell has a length, which extends from said second top end to said second bottom end, ranging from about 20mm to 40mm.

10 16. The liquid dispenser of Claim 7, wherein said shell has a length, which extends from said second top end to said second bottom end, ranging from about 25mm to 35mm.

15 17. The liquid dispenser of Claim 15, wherein said shell has a width, which extends from said left side wall to said right side wall, ranging from about 5mm to 20mm.

20 18. The liquid dispenser of Claim 16, wherein said shell has a width, which extends from said left side wall to said right side wall, ranging from about 8mm to 12mm.

19. The liquid dispenser of Claim 17, wherein said shell has a thickness, which extends from said front side wall to said rear side wall, ranging from about 2mm to 10mm.

25 20. The liquid dispenser of Claim 18, wherein said shell has a thickness, which extends from said front side wall to said rear side wall, ranging from about

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4mm to 6mm.

21. The liquid dispenser of Claim 19, wherein said rib has a length, which extends from said second bottom end to said top edge of said rib, ranging from
5 about 5mm to 30mm.

22. The liquid dispenser of Claim 20, wherein said rib has a length, which extends from said second bottom end to said top edge of said rib, ranging from about 10mm to 20mm.

10 23. The liquid dispenser of Claim 1, wherein each of said first and second peripheral walls has a wall thickness ranging from about 0.3mm to 1.0mm.

24. The liquid dispenser of Claim 1, wherein each of said first and second peripheral walls has a wall
15 thickness ranging from about 0.4mm to 0.6mm.

25. A plastic liquid dispenser for dropwise dispensing liquid, comprising:

an elongated tube having a top closed end and a bottom open end, and formed with a first opening
20 adjacent to said top closed end; and

a closed shell connected to said tube and formed with a second opening aligned axially with and in fluid communication with said first opening, said shell having a portion that is resilient and that is
25 compressible so as to generate a suction force when
said portion is pressed and is subsequently released.